

## SOLID STATE ELECTRICAL SWITCH

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5 ABSTRACT OF THE DISCLOSURE

662020" 08081E60

A 2-terminal solid state electrical switch is provided which can be connected in series with a load device in a the same manner as a conventional mechanical-contact switch, does not leak current during an "OFF" state, and operates from a dynamic pulse run mode during an "ON" state. The two-terminal solid state electrical switch of the present invention requires neither a power supply to operate, nor any mechanical movement and contact points. Consequently, no spark, arc or any mechanical noise is created in the solid state electrical switch's operation, nor does it corrode, thus allowing it to be used in a hostile environment. The solid state switch of the present invention can be put to uses not practical for conventional mechanical-contact switches, such as to control multi-appliances, as static circuit breakers, contactors and relays for fire-proof, explosion-proof, water-proof, anti-chemical, anti-corrosion, humidity resistant, dust resistant, anti-vibrations and heavy duty frequently operations. Further, a unique initialization circuit in the solid switch of the present invention resets the switch intelligently to a suitable operating mode after a power interruption, thus avoiding accidents that may endanger property and lives. The present invention also provides a highly isolated multi-point random remote control switch/relay suitable for wide industrial and other applications.